

**From:** Aram Varjabedian <avarjabedian@woodardcurran.com>  
**Sent:** Tuesday, March 06, 2018 5:48 PM  
**To:** david.burns (david.burns@state.ma.us); Turin, David  
**Cc:** jstruzziery@town.hull.ma.us; Lemnios, Philip (plemnios@town.hull.ma.us); Kate Roosa; Bill Boornazian; Frank Cavaleri; Robert Scott; jonathanhobill@state.ma.us  
**Subject:** FW: Hull Plant update & SSO - MA0101231  
**Attachments:** image002.png

All:

This is an update for the recent storm activities at the Hull WPCF, since Saturday March 3rd. The facility has been staffed 24/7 through 11:30pm Monday March 5th. Some of the notes may be a repeat of information from submittal by Frank Cavaleri on 3/3/18.

The loss of power continued through Sunday March 4th until power was restored to all of the pump stations and the plant at approximately 6:20pm.

From the last submission on 3/3/18, the plant process mode of operation has been contact stab mode, to reduce solids loading on the secondary clarifiers and eventually the aeration system air was turned off to retain secondary biomass at 1:45pm, and the return activated sludge pump turned off at 3:30pm. Chlorination for disinfection was maintained throughout the entire high flow period.

Upon power restoral, flows had dropped down to an acceptable level [6 MG] and the secondary systems turned back on at 6:30pm on Sunday evening March 4th.

Since March 4th, the facility has been managing the flows that have been influenced by high tides and street flooding.

The period of time where the chlorine contact overflowed onto the adjacent area was 4 hours on Saturday March 3rd from 12:00pm to 4:03pm when al, plant effluent pumps were running and portable trash pumps operating, also pumping from secondary tanks to the chlorine contact tanks. The influent gate located in the headworks was utilized to reduce influent flow to the facility, in order to halt the overflow from the chlorine contact tanks.

A full SSO report will be submitted by end of day on 3/7/18.

Should you need to reach me, please contact me at the plant or by cell phone.

Sincerely,

Aram

Aram Varjabedian  
Plant Manager  
Hull Wastewater Treatment Facility  
1111 Nantasket Avenue | Hull, MA 02045  
Phone 781.925.0906 | Fax 781.925.3056 | Cell 339.214.8334 [www.woodardcurran.com](http://www.woodardcurran.com)

## COMMITMENT & INTEGRITY DRIVE RESULTS

-----Original Message-----

From: Frank Cavaleri  
Sent: Sunday, March 04, 2018 5:37 AM  
To: Aram Varjabedian <[avarjabedian@woodardcurran.com](mailto:avarjabedian@woodardcurran.com)>  
Cc: Robert Scott <[rscott@woodardcurran.com](mailto:rscott@woodardcurran.com)>  
Subject: FW: Hull Plant update - MA0101231

fyi

-----Original Message-----

From: Burns, David (DEP) <[david.burns@state.ma.us](mailto:david.burns@state.ma.us)>  
Sent: Sunday, March 4, 2018 1:35 AM  
To: Frank Cavaleri <[fcavaleri@woodardcurran.com](mailto:fcavaleri@woodardcurran.com)>  
Subject: RE: Hull Plant update - MA0101231

Thanks for the info Frank, I am keeping up with all my facilities while here in Seattle (sunny and nice the last couple of days) with John Hobill (in to: list )current contact in office for this while I'm away.

Dave

---

From: Frank Cavaleri [[fcavaleri@woodardcurran.com](mailto:fcavaleri@woodardcurran.com)]  
Sent: Saturday, March 3, 2018 9:45 PM  
To: Aram Varjabedian; Burns, David (DEP); Turin, David ([Turin.David@epa.gov](mailto:Turin.David@epa.gov)); [jonathanhobill@state.ma.us](mailto:jonathanhobill@state.ma.us)  
Cc: [jstruzziery@town.hull.ma.us](mailto:jstruzziery@town.hull.ma.us); Robert Scott; Lemnios, Philip ([plemnios@town.hull.ma.us](mailto:plemnios@town.hull.ma.us)); Bill Boornazian; Kate Roosa  
Subject: FW: Hull Plant update - MA0101231

All,

This is an update to the severe storm conditions in Hull and treatment plant operations:

Following the first high tide Friday morning, we have had two additional high tides, both with more powerful winds, rain and coastal flooding. We filled our two empty aeration tanks after the flows increased on Friday afternoon, and the secondary treatment process has been in pass through mode, with aeration and the return sludge pumps shut off. We have been able to maintain primary treatment and disinfection throughout, with estimated flows over 10 MGD early Saturday morning.

A brief power outage/blip occurred around 3:30 PM on Friday, so we have been running on generator power since then, to avoid further utility power outages. The Town lost full utility power around 7 PM, and they hope to have it restored on 3/4/2018. The plant generator has been running well. We set up 3 portable pumps to aid our effluent pumping capacity, with all discharging to the chlorine contact tank (CCT). We have utilizing the newly replaced influent gate to throttle influent flows while monitoring the interceptor levels.

Between power outages and issues with our Verizon communications, we have lost SCADA access to our pump stations. We have increased our pump station manual checks in the meantime, as we work with Verizon to address the communication issues.

When flows exceeded about 8 to 10 MGD at high tide periods, our CCT has had minor to moderate overflows, during both the Friday Midnight high tide and the Saturday mid-day high tide. We will provide additional details and flow estimates when we submit our SSO report.

Currently (9:30 PM 3/3/2018) we are maintaining around 5-7 MGD. We are preparing for the next high tide this Saturday evening, although anticipate less severe flooding.

We have been staffing the plant 24 hrs with various levels of plant and support staff.

More to come - thx – frank

Frank J. Cavaleri  
Sr. Principal  
Woodard & Curran

Dedham Office telephone: (781) 613-0441

Dedham Office fax: 781-251-0847

cell: 617-590-4571

email: [fcavaleri@woodardcurran.com](mailto:fcavaleri@woodardcurran.com)<<mailto:fcavaleri@woodardcurran.com>>

Mailing Address: 980 Washington Street, Suite 325, Dedham, MA 02026-6732

[www.woodardcurran.com](http://www.woodardcurran.com)<[https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_www.woodardcurran.com\\_d=DwMFAg&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns\\_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_d=DwMFAg&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>)>

This e-mail communication and any attachments are confidential and intended only for the use of the designated recipients named above. This communication may be an attorney-client communication and as such is privileged and confidential. If you are not the intended recipient, you are hereby

notified that you have received this communication in error and that any review, disclosure, dissemination, distribution or copying of it or its contents is prohibited.

From: Aram Varjabedian

Sent: Friday, March 2, 2018 2:23 PM

To: david.burns (david.burns@state.ma.us<mailto:david.burns@state.ma.us>)

<david.burns@state.ma.us<mailto:david.burns@state.ma.us>>; Turin, David

(Turin.David@epa.gov<mailto:Turin.David@epa.gov>)

<Turin.David@epa.gov<mailto:Turin.David@epa.gov>>;

jonathanhobill@state.ma.us<mailto:jonathanhobill@state.ma.us>

Cc: jstruzziery@town.hull.ma.us<mailto:jstruzziery@town.hull.ma.us>; Frank Cavaleri

<fcavaleri@woodardcurran.com<mailto:fcavaleri@woodardcurran.com>>; Robert Scott

<rscott@woodardcurran.com<mailto:rscott@woodardcurran.com>>; Lemnios, Philip

(plemnios@town.hull.ma.us<mailto:plemnios@town.hull.ma.us>)

<plemnios@town.hull.ma.us<mailto:plemnios@town.hull.ma.us>>

Subject: Hull Plant update - MA0101231

Good afternoon:

I am providing an update of the Hull facility's status. So far, no power loss issues. We have had the first high tide period, and influent flows have risen to approximately 8 MG. A number of the pump stations have high wet well alarms, due to the rain and tidal surge. The rain is continuing, and there are two additional high tides forecasted over the next 24 hrs.

All plant equipment is operating adequately at the present time, however, we may need to throttle the influent isolation gate as flows continue to rise and pumping capability is almost already maximized. The secondary aeration system is still on, but the aeration air is being shut down, to retain biomass, and due to the off line aeration tanks being full

In the event that some flow will need to be diverted, We wanted to inform you now, and will make all attempts to process through the facility.

Should you need to reach me, please contact me at the plant or by cell phone.

Sincerely,

Aram

Aram Varjabedian  
Plant Manager

Hull Wastewater Treatment Facility

1111 Nantasket Avenue | Hull, MA 02045

Phone 781.925.0906 | Fax 781.925.3056 | Cell 339.214.8334

[www.woodardcurran.com](http://www.woodardcurran.com)<[https://urldefense.proofpoint.com/v2/url?u=http-](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>)

[3A\\_\\_www.woodardcurran.com\\_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>)

[fVahWLOQWnGCCAfCDz1Bns\\_w&r=Vq4BEMQuyJ-](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>)

[WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>)

[tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>)

[Description: W&C transparent blue email sized] COMMITMENT & INTEGRITY DRIVE RESULTS